

Regional HIV/AIDS Epidemiologic Profile of Central HSR, Massachusetts: 2014

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2014, this resulted in the removal of 4,135 HIV/AIDS cases, of which 973 have died and 3,162 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual reported risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual reported risk category was used with the intention of identifying HIV reported risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of men living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual reported risk category. The application of the presumed heterosexual reported risk category to men is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate reported risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual reported risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2013: Central HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	1,632	59%
People Reported with HIV or AIDS who are Deceased	1,118	41%
Total Number of People Reported with HIV Infection or AIDS	2,750	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 2. Average annual rate of HIV infection diagnosis from 2010 to 2012 and HIV/AIDS prevalence rate on 12/31/13¹: Central HSR, Massachusetts²

Average annual HIV diagnosis rate from 2010–2012	Average rate per 100,000	Average annual number of HIV diagnoses
Central HSR, MA	7.0	60.0
Massachusetts Total	10.5	688.3
HIV/AIDS prevalence rate on 12/31/13	Rate per 100,000	Number of people living with HIV/AIDS
Central HSR, MA	190.2	1,632
Massachusetts Total	292.7	19,165

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2003–2012, Central HSR, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2003	1,278	35	87
2004	1,320	42	84
2005	1,350	42	72
2006	1,399	32	81
2007	1,430	30	61
2008	1,320	29	58
2009	1,459	28	54
2010	1,485	22	59
2011	1,522	14	61
2012	1,569	23	60

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 4. People diagnosed with HIV infection from 2010–2012¹ and people living with HIV/AIDS on December 31, 2013 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Central HSR, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	114	63%	1,012	62%
Female	66	37%	620	38%
Place of Birth:	N	%	N	%
US	92	51%	988	61%
Puerto Rico/US Dependency ³	24	13%	286	18%
Non-US	64	36%	358	22%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	62	34%	687	42%
Black (non-Hispanic)	62	34%	418	26%
Hispanic/Latino	48	27%	494	30%
Asian/Pacific Islander	5	3%	26	2%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	60	33%	419	26%
Injection Drug Use (IDU)	19	11%	433	27%
MSM/IDU	5	3%	49	3%
Heterosexual Sex	27	15%	300	18%
Other	0	0%	48	3%
Total Undetermined	69	38%	383	23%
• Presumed Heterosexual Sex ⁴	35	19%	186	11%
• Undetermined ⁵	34	19%	197	12%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2013	
Under 13	0	0%	3	<1%
13 to 19	5	3%	9	1%
20 to 24	18	10%	27	2%
25 to 29	15	8%	57	3%
30 to 34	24	13%	73	4%
35 to 39	30	17%	111	7%
40 to 44	30	17%	198	12%
45 to 49	20	11%	260	16%
50 to 54	21	12%	364	22%
55 to 59	9	5%	265	16%
60+	8	4%	265	16%
Total⁶	180	100%	1,632	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 5. People living with HIV/AIDS on December 31, 2013 by gender and race/ethnicity: Central HSR, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	507	50%	180	29%
Black (non-Hispanic)	198	20%	220	35%
Hispanic/Latino	280	28%	214	35%
Asian/Pacific Islander	22	2%	-- ²	-- ²
Other/Undetermined	5	<1%	-- ²	-- ²
Total²	1,012	100%	620	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 6. People living with HIV/AIDS on December 31, 2013 by gender and exposure mode: Central HSR, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	419	41%	N/A	N/A
Injection drug use (IDU)	264	26%	169	27%
MSM/IDU	49	5%	N/A	N/A
Heterosexual sex	80	8%	220	35%
Other	26	3%	22	4%
Total Undetermined	174	17%	209	34%
• Presumed heterosexual sex ²	N/A	N/A	186	30%
• Undetermined ³	174	17%	23	4%
Total	1,012	100%	620	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Central HSR, Massachusetts¹, 2003–2012²

	Male		Female		Total
	N	%	N	%	
2003	46	53%	41	47%	87
2004	50	60%	34	40%	84
2005	51	71%	21	29%	72
2006	50	62%	31	38%	81
2007	38	62%	23	38%	61
2008	33	57%	25	43%	58
2009	39	72%	15	28%	54
2010	35	59%	24	41%	59
2011	37	61%	24	39%	61
2012	42	70%	18	30%	60

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Central HSR, Massachusetts¹, 2003–2012²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2003	35	40%	28	32%	21	24%	87
2004	34	40%	25	30%	24	29%	84
2005	31	43%	22	31%	17	24%	72
2006	24	30%	32	40%	22	27%	81
2007	26	43%	22	36%	12	20%	61
2008	24	41%	16	28%	16	28%	58
2009	20	37%	20	37%	12	22%	54
2010	20	34%	26	44%	12	20%	59
2011	20	33%	18	30%	20	33%	61
2012	22	37%	18	30%	16	27%	60

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Central HSR, Massachusetts¹, 2003–2012²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2003	50	57%	10	11%	27	31%	87
2004	45	54%	14	17%	25	30%	84
2005	37	51%	12	17%	23	32%	72
2006	39	48%	12	15%	30	37%	81
2007	32	52%	6	10%	23	38%	61
2008	30	52%	13	22%	15	26%	58
2009	34	63%	5	9%	15	28%	54
2010	28	47%	6	10%	25	42%	59
2011	33	54%	8	13%	20	33%	61
2012	31	52%	10	17%	19	32%	60

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Central HSR, Massachusetts¹, 2003–2012²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2003	21	24%	14	16%	-- ⁵	-- ⁵	13	15%	-- ⁵	-- ⁵	17	20%	16	18%	87
2004	17	20%	19	23%	-- ⁵	-- ⁵	23	27%	-- ⁵	-- ⁵	14	17%	9	11%	84
2005	26	36%	16	22%	0	0%	7	10%	0	0%	13	18%	10	14%	72
2006	24	30%	11	14%	-- ⁵	-- ⁵	12	15%	-- ⁵	-- ⁵	18	22%	15	19%	81
2007	23	38%	8	13%	0	0%	8	13%	0	0%	12	20%	10	16%	61
2008	15	26%	11	19%	-- ⁵	-- ⁵	11	19%	-- ⁵	-- ⁵	9	16%	11	19%	58
2009	21	39%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	10	19%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	10	19%	54
2010	15	25%	5	8%	-- ⁵	-- ⁵	10	17%	-- ⁵	-- ⁵	13	22%	13	22%	59
2011	16	26%	8	13%	-- ⁵	-- ⁵	15	25%	-- ⁵	-- ⁵	8	13%	13	21%	61
2012	29	48%	6	10%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	14	23%	8	13%	60

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Central HSR, Massachusetts¹, 2003–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2003	29	87	33%
2004	31	84	37%
2005	28	72	39%
2006	28	81	35%
2007	25	61	41%
2008	27	58	47%
2009	19	54	35%
2010	19	59	32%
2011	22	61	36%
2012	19	60	32%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Central HSR, Massachusetts,¹ 2010–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	39	114	34%
Female	21	66	32%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	18	62	29%
Black (non-Hispanic)	28	62	45%
Hispanic/Latino	13	48	27%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	28	92	30%
Puerto Rico/US Dependencies ⁴	5	24	21%
Non-US	27	64	42%
Total	60	180	33%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14